

# subMIT status

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# subMIT status: Alma 9 Upgrade

- Migration from CentOS 7 to Alma Linux 9 is complete
- Default ssh login to submit.mit.edu, jupyter access, batch queues all point to Alma 9 resources
- A limited (and rapidly decreasing) amount of CentOS 7 resources are still available
- CentOS 7 environment can be recreated on Alma 9 resources through the use of singularity containers
  - See <https://submit.mit.edu/submit-users-guide/future/alma.html>
  - Migrating to newer environment/software versions encouraged in the long run in any case
- Note that memory limits are more strictly enforced than before the upgrade
  - Default memory limits for Jupyter access have been increased from 500MB to 2GB
  - If your jobs/interactive usage need more memory you can explicitly request it from the Jupyter drop down menu or when submitting your slurm jobs
- **Don't hesitate to get in touch with us in case of any issues, we are committed to making sure we haven't broken any use cases and/or fixing/improving any issues which have been introduced**

## subMIT status: Storage Upgrade

- Mass storage system on /data/submit consists of ~400TB of spinning disks in a distributed GlusterFS storage system
- Intended for large files, largely sequential access
- Performance can suffer if large numbers of small files/directories are written there
- **General experience with the performance of the system has been mixed both in terms of high performance analysis use cases, and user-induced load degrading the quality of service**
- Upgrade to more performant CephFS system in the planning and testing stages
- We will keep users informed on the status and progress of this, but eventually your data will be migrated ~transparently and the new system will be faster, more consistent, and more scalable